

CLAIMS

1. A motor-driven reinforcing bar binder comprising:
 - a binding wire feeding mechanism that feeds a binding wire so as to be wound around a reinforcing bar;
 - 5 a binding wire twisting mechanism that grasps and twists the binding line wound around the reinforcing bar so as to bind the reinforcing bar;
 - a cooling fan device provided within a housing of the reinforcing bar binder;
 - 10 a fan driving control unit that on-off controls the cooling fan device;
 - a temperature detecting device that detects an interior temperature of the reinforcing bar binder; and
 - a comparison device that compares the detected temperature by the temperature detecting device with a reference temperature,
 - 15 wherein the fan driving control unit drives the cooling fan device when the interior temperature of the reinforcing bar binder exceeds the reference temperature.
- 20 2. The motor-driven reinforcing bar binder according to claim 1, further comprising:
 - a timer that counts a fan driving time,
 - wherein the fan driving unit starts to drive the cooling fan device when the interior temperature of the reinforcing bar binder exceeds the reference temperature and a trigger
 - 25 signal for a binding operation is received, and stops the cooling

fan device after a predetermined time elapses.

3. The motor-driven reinforcing bar binder according to claim 1,

5 when the trigger signal for the binding operation is received during a period that the predetermined time elapses after a start of a driving of the cooling fan device, a counting operation by the timer is reset.

10 4. The motor-driven binding machine according to claim 1, further comprising:

a driving motor that drives the binding wire twisting mechanism,

15 wherein the cooling fan device comprises a motor, a fan and a fan case.

5. The motor-driven binding machine according to claim 4, wherein the cooling fan device is arranged on a rear side of the driving motor and on or in a vicinity of an axial line
20 of the driving motor.

6. A motor-driven reinforcing bar binder comprising:

a binding wire feeding mechanism that feeds a binding wire so as to be wound around a reinforcing bar;

25 a binding wire twisting mechanism that grasps and twists the binding line wound around the reinforcing bar so as to

bind the reinforcing bar;

a cooling fan device provided within a housing of the reinforcing bar binder;

a fan driving control unit that on-off controls the cooling
5 fan device;

a timer that counts a fan driving time,

wherein the fan driving control unit starts to drive the cooling fan device when a trigger signal for a binding operation is received, and stops the cooling fan device after a
10 predetermined time elapses.

7. The motor-driven reinforcing bar binder according to claim 6, further comprising:

a temperature detecting device that detects an interior
15 temperature of the reinforcing bar binder; and

a comparison device that compares the detected temperature by the temperature detecting device with a reference temperature,

wherein the fan driving unit starts to drive the cooling fan device when the interior temperature of the reinforcing
20 bar binder exceeds the reference temperature and a trigger signal for a binding operation is received, and stops the cooling fan device after the predetermined time elapses.

8. The motor-driven reinforcing bar binder according to claim
25 6,

when the trigger signal for the binding operation is

received during a period that the predetermined time elapses after a start of a driving of the cooling fan device, a counting operation by the timer is reset.

- 5 9. The motor-driven reinforcing bar binder according to claim 7,

when the trigger signal for the binding operation is received during a period that the predetermined time elapses after a start of a driving of the cooling fan device, a counting
10 operation by the timer is reset.

10. The motor-driven binding machine according to claim 6, further comprising:

a driving motor that drives the binding wire twisting
15 mechanism,

wherein the cooling fan device comprises a motor, a fan and a fan case.

11. The motor-driven binding machine according to claim 10,
20 wherein the cooling fan device is arranged on a rear side of the driving motor and on or in a vicinity of an axial line of the driving motor.